

Claims

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What is claimed is:

1. (canceled)

2. (canceled)

3. (canceled)

4. (canceled)

5. (canceled)

6. (currently amended) A planetary transmission for a bicycle, comprising:

The a first rotatable unbalanced element as a receiver of the power from a foot's muscular energy and gravitational energy, converting both of them into mechanical energy for transmitting the driving power via the second, one-way directional rotatable element, and the third opposing rotatable element to the driving sprocket of a bicycle, which is attached to the third element and freely rotates with this third element on a crank's axle for transmitting of the driving power via a chain to a free wheel and then to a drive wheel of a bicycle, where the bicycle is in a course of forward motion from the pedals.

An additional planetary transmission for a bicycle comprising:

~~The first rotatable unbalanced element as a receiver of power from two different sources and energy such as a foot's muscular energy and gravitational energy converts that energy into mechanical energy for transmission of the driving power via a second one-way directional rotatable element and a third opposing rotatable element to a driving sprocket of the bicycle, which is fixed to the third element and freely rotates with it on a crank's axle for transmission of the driving power, via a chain to a freewheel and then to a drive wheel of a bicycle, where it is in a course of normal forward motion from the pedals,)~~

and the first rotatable element, being connected to the crank by means of a leading axle, rotates clockwise together with the crank's axle under the foot's muscular energy and the earth gravity into positive zone of rotation, and under the inertial energy supported by foot's muscular energy in the negative zone of rotation, where the inertial energy is appearing, due to the increased speed of rotation in the positive (active) zone of rotation, and at the same time the first element rotates counter-clockwise around its own axis of rotation together with the leading axle, powered by the foot muscles and the displaced unbalanced mass, while the second rotatable element being connected to the first rotatable element by means of the overrunning clutch, and also connected to the third element by means of toothed, rotates clockwise around the third element and around the crank's axes of rotation, and powered the same way as the first element on its clockwise rotation, and at the same time the second element rotates counter-clockwise around its own axle of rotation, powered the same way as the first element on its counter-clockwise rotation, and consequently, makes the third element with the driving sprocket on it, rotate faster the usual system(meaning the system without this transmission) using the same

muscular energy. (The first rotatable element being connected to a crank by means of a leading axle, rotates clockwise together with the crank around the crank's axle and at the same time rotates counter-clockwise around its own axis of rotation together with the leading axle, which is connecting both rotating elements to each other, while the second rotatable element, being connected to the first rotatable element by means of overrunning clutch and to the third rotatable element by means of toothed, rotates clockwise around the third element and crank's axes of rotation, as well as the first element, and at the same time the second element rotates counter-clockwise around its own axle of rotation and due to that, makes the third element, as well as the driving sprocket of the bicycle, rotate faster than usual, than when the driving sprocket rotates together with the crank's axle under the same equal conditions)

7. (currently amended) A method of getting obtaining higher riding speed comprising the steps of:

- placing a first rotatable element on a crank,
- placing a second rotatable element on the first element, connecting the first element and the second element to one another by means of an over-running clutch,
- placing the third element on the crank's axle for free rotation on it,
- attaching the crank's to the crank's axle for rotation together with it,
- rotating the first element, powered foot's muscular energy and gravitational energy and converting that energy into mechanical energy for transmission of driving power, via a second one-way directional element to a third opposing rotatable element, which is together with a driving sprocket freely rotates on the crank's axle wherein the

crank being connected to the crank's axle rotates clockwise together with the first element, the first and the second elements at the same time rotate counter-clockwise around their own axes of rotation together within leading axle, which connects the first element and the crank to each other, the second rotatable element being connected to the first and to the third elements at the same time, makes the third element, as well as the driving sprocket of the bicycle rotates faster than usual when driving sprocket rotates together with the crank's axle under the same equal power conditions.

8. (new) The planetary transmission of claim 6, wherein the first rotatable element is a gravitational pedal as a receiver of energy from earth gravity and energy from foot muscles.

9. (new) The planetary transmission of claim 6, wherein the third element is a sun disk with a chainomatic periphery instead of a gear periphery, while the second element is a satellite sprocket, combined with an overrunning clutch for one-way directional kinematics interaction with a sun disk by means of the chainomatic periphery.